ReMuNet Intermodal Statistics

Webinar



OpenAI. DALL·E Image of Combined Transport and Statistics. ChatGPT, 17 Sept. 2024, https://chat.openai.com/.



Welcome!

M.Sc. Ing. Vivin Kumar Sudhakar, Dr. Paul Hebes 05 November 2024

Presentation Agenda

Team

This is us. A short introduction

Best practice

Glimpse of project KV-Stat as a German example for CT statistics







Framework

Regulations & methodological overview of CT statistics (member state level (a selection) and EU level)

Output

Consolidation of CT statistics as national country sheets (a selection)

page

02



M.Sc. Ing. Vivin Kumar Sudhakar



Project Manager

<u>vsudhakar@sgkv.de</u>

Experience

More than 7 years of experience as a logistics professional

Applied research









Project manager in 6 German and European projects

Evaluation of infrastructure proposals

Feasibility studies and consulting

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SGKV e.V.

Network



Tools



intermodal-academy.com



intermodal-map.com



intermodal-info.com





Portfolio



Web: sgkv.de

Knowledge-based Planning

Dr. Paul Hebes



Experience

More than 15 years of
professional experienceUrban d
planning a
resProject manager in 40+
projectsData

Geographer Freelance consultant ⋈ paul.hebes@knowledge-based.info









Knowledge-based Planning

All Up to date Mobility / Transport Urban development



availability of intermodal statistics in Europe

National Country Sheets for ReMuNet project

Guideline for delivery and loading areas in Berlin

GIS framework

Goods flow visualization

Bikesharing-Berlin



Urban Freight Rail Development Tool

Large and heavy haulage in Berlin

Goods flow analysis

Charging infrastructure Berlin





Micro-Depots Berlin



Logistics concept Lindau



Data supply and availability for leisure transport destinations Municipal data requirements New Mobility Services



IWVK Study



Key Projects



KV Dashboar



Forecast structural data Augsburg



Structural database











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07

What is behind the numbers?

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The intention of UIRR within the ReMuNet project was to get a better understanding of the current statistical methodologies and data compilation proposed by authorities and industry associations related to the development of intermodal transport.



Dal

Eurostat and five countries were selected

Five countries were selected, in addition to Eurostat, for the research on legal basis:

 \rightarrow Austria, Germany, Slovakia, Sweden, The Netherlands

- Two guiding questions were:
 - Which laws or regulations require the • collection of CT-relevant statistics?
 - Are there any other conventions or agreements beyond that of the European Union for example with the OECD?









Poll results









Many EU regulations but few national laws



No specific regulation refers directly to Combined Transport (CT) / Intermodal statistics

Individual modes of transport address elements that are specific to CT, such as the type of loading units and goods.

7 + X

On average, there were only two to three relevant legal bases in the countries analysed.





No specific regulation on CT statistics

Intermodality addressed indirectly

Seven EU Regulations and Directives, plus numerous "associated" legal basis influence statistics on intermodal transport on EU-level.

Less national laws

National legal implementations Germany - An example

Legal basis for statistics: Federal Statistics Act or the Bundesstatistikgesetz (**BStatG**)

- Specifies obligation to provide information
- Regulates the duties of all stakeholders to cooperate with the Federal Statistics Office
- No specific reference to individual sectors
- Data collection guided by EU regulations or national data management policies
- Specific legislation VerkStatG for transportation created under its purview

(VerkStatG)

- rail transportations



Legal basis for transport statistics: Transport Statistics Act or the Verkehrsstatistikgesetz

Specifies the survey area, statistics, reporting periods and data transmission for sea, inland waterway, road, air,

Defines the **obligation** to provide information, implementation, transfer, publication, authorisation

Specific sections focus only on different transport sectors, e.g., rail freight sector, however CT is mentioned explicitly within these sectors

Statistical Methodologies

- Conducted metadata analysis to catalogue ulletexisting statistical methodologies for intermodal statistics
- Evaluated metadata elements like data origin, ٠ frequency, and format to understand data organization
- Reviewed data collection methods used by ٠ Eurostat, national statistical offices, and associations
- Assessed how and what statistical data is collected for individual transport modes









1 European Organisation with focus on road/rail: UIRR

1 European Organisation with focus on road/inland navigation: INE

2 National Organisations with focus on road/rail: SGKV, Combinet

2 National Organisations with focus on road/inland navigation: SPC, VBW

Poll results







83 übermittelte Antworten

page

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30% Full Surveys

Valuable insights were gained

- We gathered 28 "cases" of how national (statistical) agencies and associations collect data for CT statistics.
- All detailed data is available in an Excel file containing the tabular metadata.
- The data was used to gain a broad overview.



Screenshot of metadata in Excel file



14 15 16

Main findings

Methods

No unified method for collecting Combined Transport (CT) data; various surveys and databases exist, often focusing on individual transport modes rather than CT.

Parameter and Unit of Measurement

CT data highlights transport performance (tonne-kilometres, cargo weight, TEU), but not all collected data is published, indicating possible gaps.

03

Type of Data Collection

CT data is gathered through full surveys for rail, water, and sea, while samples are used for road transport.





Form of Data Collection

Data is collected through questionnaires, digital interfaces, register extracts, and, occasionally, telephone interviews or paper forms.

Legal Basis

Data collection is mandated by European and national laws; associations collect data primarily for public interest without legal mandates.

Temporal and Spatial Resolution

Most data is published annually, with some monthly or quarterly reports; detailed data available at various geographic levels (NUTS 0, 2, 3, ports).

Recommendations for Improving Statistical Recording in Combined Transport

Harmonize Legal Frameworks

- Align and standardize national and EU regulations to enhance data consistency and comparability
- Strengthen enforcement of harmonized standards ٠ for more reliable statistics
- Revise EU directives to improve the collection and ۲ definition of Combined Transport data



- stakeholders





Standardized Data Collection Methods

Create unified protocols for harmonizing data collection across different modes of transport and

Develop a minimum standardized dataset based on existing frameworks (e.g., eFTI working group)

Emphasize data integrity: Use collected data in its original, unaltered form to prevent distortions

Additional Recommendations

Standardized Data Parameters and Integrity

- Harmonize collection parameters across transport modes to improve comparability
- Establish uniform units of measurement to avoid errors in data processing

Improve Coverage and Frequency of Data Collection

- Increase the detail of road transport data and complement existing datasets for more comprehensive analysis
- Collect data at shorter intervals while considering the burden on data providers





05 Enhance Data Timeliness

- Implement efficient data collection and processing systems (e.g., realtime data tools, automated systems)
- Speed up data availability to support timely and informed decision-making

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Design and development of 'national country sheets'

- Data for more than 100 indicators was collected for 17 countries
- Countries are bordering two TEN-T corridors: North Sea - Baltic and Rhine - Danube.
- Selected data has been converted into national country sheets.
- They provide a focussed insight into the freight transport market and combined transport in the respective countries.



- collection
- 2. Data collection



Seventeen countries in the North Sea - Baltic and Rhine - Danube corridors (Source: KBP)





Three steps towards the 'national country sheets'

1. Analysis of existing indicators and validation of feasibility of data

3. Visualisation of the data

17 country sheets & Excel file available

- The country sheets consist of two pages
- They present a selection of indicators and data.
- The selection was chosen regarding the ReMuNet project context.
- The sheets combine visual elements and text passages
- A modified Excel database with a filtering interface allows users to find and select data in a user-friendly way



Sample of the country sheets



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BSR	Cabinet of Transport	Competences
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Country Name	CT Operators	Date Data entry
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Funding Institution	Funding Programme	Funding Sector
Funding Term	Funding Type of Measure	Intrastructure Manager
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Explanation for data entr	ry 🚽	Value

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What sources do you use when looking for data on intermodal transport?







83 übermittelte Antworten

national databases stakeholder uirr/sgkv Data national NSA UIRR liner operator source



Best practice Some examples

ERA Railway Factsheets

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(https://www.era.europa.eu/content/erarailway-factsheets)





(https://sgkv.de/der-kombinierteverkehr/zahlen-zum-kv/)





Eurostat | Data Browser

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Germany												
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(https://ec.europa.eu/eurostat/web/main/data /database)

Best practice KV-Stat

- Feasibility study for the development of a statistical platform for combined transport
- CT data in Germany/ EU by public and private institutions identified
- Demand-oriented data catalog for CT developed and published on Mobilithek (run by German Federal Ministry for Transport)
- Feasibility of data collection/generation and the willingness to provide data currently under evaluation
- Framework for the development of a demand-oriented intermodal statistics platform would be finalized by Feb. 2025





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Search Results > Of	fer Details				
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GEOGRAPHY	CATEGORY				
Doutschland (DE)					
Deutschland (DE)	Freight and logistics				

Further information: <u>https://sgkv.de/portfolio/projekte/kv-stat/</u>

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Thank You

for your attention